In The Claims

1. (previously presented) A method for treating a disease state in mammals caused by mammalian nasal and sinus cells involved in the inflammatory response comprising contacting the mammalian nasal and sinus cells with an inflammatory mediator; wherein the inflammatory mediator is present in an amount capable of reducing the undesired inflammatory response, is an antioxidant, and is selected from the group consisting of pyruvate and a pyruvate precursors, wherein the pyruvate precursor is not propylene glycol.

2. (original) The method according to claim 1, wherein the inflammatory mediator is formulated into nasal drops.

3. (original) The method according to claim 2, wherein the inflammatory mediator is formulated in a concentration of about 0.1mM to 10.0 mM.

4. (original) The method according to claim 1, wherein the inflammatory mediator is formulated into a nasal ointment.

5. (original) The method according to claim 4, wherein the inflammatory mediator is formulated in a concentration of 0.1mM to 10.0 mM.

6. (original) The method of claim 1, wherein the inflammatory response being reduced is at least one of the following: oxygen radical production, hydrogen peroxide production, cytokine and protease production, prostaglandin production, erythema, histamine and interleukin production.

7. (canceled)

8. (previously presented) The method of claim 1, wherein the inflammatory mediator is pyruvate.

9. (previously presented) The method of claim 8, wherein the pyruvate is selected from the group consisting of pyruvic acid, lithium pyruvate, sodium

pyruvate, potassium pyruvate, magnesium pyruvate, calcium pyruvate, zinc pyruvate, manganese pyruvate, and mixtures thereof.

10. (previously presented) The method of claim 1, wherein the inflammatory mediator is a pyruvate precursor.

11. (previously presented) The method of claim 10, wherein the pyruvate precursor is selected from the group consisting of pyruvyl-glycene, pyruvyl-alanine, pyruvyl-leucine, pyruvyl-cysteine, pyruvyl-valine, pyruvyl-isoleucine, pyruvyl-phenylalanine, pyruvamide, dihydroxyacetone, and salts of pyruvic acid.

12. (original) The method of claim 1, wherein the disease state is selected from the group consisting of rhinitis, eosiophilia syndrome, and sinusitis.

13. (original) The method of claim 1, further comprising contacting the mammalian nasal and sinus cells with a therapeutic agent.

14. (original) The method of claim 13, wherein the therapeutic agent is administered prior to the inflammatory mediator.

15. (original) The method of claim 13, wherein the therapeutic agent is administered concomitantly with administration of the inflammatory mediator.

16. (original) The method of claim 13, wherein the therapeutic agent is administered after administration of the inflammatory mediator.

17. (original) The method of claim 13, wherein the therapeutic agent is one or more agents selected from the group consisting of antibacterials, antivirals, antifungals, antihistamines, proteins, enzymes, hormones, nonsteroidal anti-inflammatories, cytokines, insulin, vitamins and steroids.

18. (original) The method of claim 13, wherein the therapeutic agent is oxymetazoline.

19. (withdrawn) A nasal solution, comprising:

a) water,

b) sodium chloride, 0.65% by weight,

c) pyruvate, at least 0.1mM,

d) buffer, and optionally

e) a preservative.

wherein the nasal moisturizing saline solution is buffered and made isotonic.

20. (withdrawn) The nasal solution of claim 19, wherein the pyruvate is present in the solution at a concentration between from about 0.1mM to about 10mM.

21. (withdrawn) The nasal solution of claim 19, wherein the pyruvate is present in the solution at a concentration between from about 0.5mM to about 10mM.

22. (withdrawn) The nasal solution of claim 19, wherein the buffer is selected from the group consisting of sodium bicarbonate, disodium phosphate/sodium phosphate, and monobasic potassium phosphate/sodium hydroxide.

23. (withdrawn) The nasal solution of claim 19, wherein the preservative is selected from the group consisting of phenylcarbinol, benzalkonium chloride, and thimerosal.

24. (withdrawn) The nasal solution of claim 19, wherein the pyruvate is present in the solution at a concentration of about 5mM, the buffer is sodium bicarbonate.

25. (withdrawn) The nasal solution of claim 19, further comprising a therapeutic agent wherein the therapeutic agent is one or more agents selected from the group consisting of antibacterials, antivirals, antifungals, antihistamines, proteins, enzymes, hormones, nonsteroidal anti-inflammatories, cytokines, insulin, vitamins and steroids.

26. (withdrawn) The method of claim 13, wherein the therapeutic agent is oxymetazoline.

27. (previously presented) A method for the treatment of rhinitis, eosinophilia syndrome, and sinusitis, comprising administering a nasal solution to the nostrils of a patient in need thereof, wherein the nasal moisturizing saline solution comprises:

a) water,

b) sodium chloride, 0.65% by weight,

c) pyruvate, at least 0.1mM,

d) buffer, and optionally

e) a preservative.

wherein the nasal moisturizing saline solution is buffered and made isotonic.

28. (original) The method of claim 27, wherein the pyruvate is present in the solution at a concentration between from about 0.1mM to about 10mM.

29. (original) The method of claim 27, wherein the buffer is selected from the group consisting of sodium bicarbonate, disodium phosphate/sodium phosphate, and monobasic potassium phosphate/sodium hydroxide.

29. (original) The method of claim 27, wherein the preservative is selected from the group consisting of phenylcarbinol, benzalkonium chloride, and thimerosal.

30. (original) The method of claim 27, wherein the pyruvate is present in the solution at a concentration of about 5mM, the buffer is sodium bicarbonate, and the preservative is phenylcarbinol.

31. (previously presented) The method of claim 13, wherein the therapeutic agent is an antibacterial.